

FOX RIVER *CURRENT*

November/December

1999

Vol. 2, No. 5

Update from the Lower Fox River Intergovernmental Partnership

Dredging Resumes at Deposit N and Begins at SMU 56/57

By Kelly Mella and Corinne Billings,
Wisconsin Department of Natural
Resources

The dredging of sediment contaminated with polychlorinated biphenyls (PCBs) began in late August at the two pilot project sites on the Lower Fox River.

Dredging resumed at Deposit N near Kimberly on August 19. "We're returning to complete the important work we started last year to further protect human health and the environment," said Wisconsin Department of Natural Resources (DNR) Project Manager Bill Fitzpatrick.

Deposit N is the site of the first cooperative cleanup effort, which began last fall and was prematurely shut down by cold weather despite an around the clock work schedule. Approximately 4,200 cubic yards of sediment, containing nearly 100 pounds of PCBs, were removed in last fall's dredging effort.

Fitzpatrick said that for this second phase of the project, crews operated 12 hours a day until early October. Plans called for removing an additional 3,000 cubic yards of sediment. Prior to resuming the dredging, sediment remaining in Deposit N contained PCB concentrations of less than 50 parts per million. Contaminated sediment was disposed in Winnebago County's Sunnyview Landfill.

DNR is managing the project and also helping to fund it, along with contributions from the Fox River Coalition, which includes industries, local municipalities, environmental groups, and the U.S. Environmental Protection Agency.



A hydraulic dredge "vacuums" sediments from the Lower Fox River at SMU 56/57 in Green Bay.

Dredging began at Sediment Management Unit (SMU) 56/57 on August 30. The nine-acre site is located downstream of the De Pere Dam, about three miles from the mouth of the Fox River. This location is the site of some of the river's highest concentrations of PCBs.

Bob Behrens, DNR Project Manager for the SMU 56/57 pilot project, described the two goals of the project. "First, we wanted to protect wildlife and human health by removing PCBs from the river, and second, we wanted to gather information on the cost effectiveness of dredging as a cleanup option," he said.

Plans for SMU 56/57 called for the removal of 80,000 cubic yards of contaminated sediment and crews are operating 24 hours a day to keep the project on schedule for completion near Thanksgiving.

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EPA OK's \$1.5 Million Grant to DNR for Fox River Cleanup Plan

By Bri Bill, U.S. Environmental Protection Agency and Corinne Billings, Wisconsin Department of Natural Resources

In early October, the U.S. Environmental Protection Agency (EPA) approved a \$1.5 million grant request by the Wisconsin Department of Natural Resources (DNR) to finish developing a cleanup plan for polychlorinated biphenyl (PCB) contaminated sediment in the Lower Fox River. The funding supplements previous grant requests totaling \$2 million during fiscal years 1997 and 1998, for a total of \$3.5 million. While DNR is the lead agency in preparing these remedial studies, EPA and DNR are working together on this effort.

The grant supports DNR's work on the Remedial Investigation and Feasibility Study (RI/FS), which will provide comprehensive engineering, planning, and scientific analysis to support a proposed cleanup plan for the Lower Fox. The completed RI/FS and the draft proposed plan are expected to be released in late spring 2000.

The additional funds and time will be used by DNR and its consultant, ThermoRetec, Inc., to respond to comments and address technical concerns on the draft RI/FS, which was released in February 1999. The DNR will respond to comments from the public, government agencies, and the Fox River Group (FRG). Recently obtained data on PCB concentrations in sediment, water, fish and bird tissues will also be included in the RI/FS. In addition, EPA requested that the scope of work for the RI/FS be expanded to include the entire bay of Green Bay. This request creates a significant amount of additional work for this project.

"EPA is committing these additional resources and time in an effort to provide the most thorough, scientifically comprehensive analysis possible," said Regional Administrator Francis X. Lyons. "However, expanding the scope of the analysis to include Green Bay should, by no means, be taken as an indicator that EPA envisions large-scale cleanup of the bay. But we do need to know what the PCB impacts have been, and what needs to be done to minimize additional environmental impacts in the future."

A draft, proposed cleanup plan will be included with the revised RI/FS. Once issued, people will have an opportunity to share their comments and concerns before the proposed cleanup plan is finalized.

Dredging from page 1

The Fox River Group (FRG) of area paper mills, potentially responsible for contamination of the river with PCBs, has committed up to \$9 million in funding for the project.

Four Season Environmental, a contractor hired by the FRG and approved by the DNR, is using a hydraulic dredge to remove contaminated sediment from the river. A suspended silt curtain anchored to the riverbed isolates the dredge area from the rest of the river. Dredged sediment is pumped through a pipeline to an enclosed on-shore facility for dewatering (drying). Water removed from the sediment is treated to meet discharge permit standards and then returned to the river, while the dried sediment is transported to the Fort James Landfill for disposal.

Fort James Corporation, an FRG member, built a separate cell in its existing landfill for this project. The cell was engineered to keep PCB-contaminated sediment totally isolated from the environment. Fort James will monitor any leachate (liquid formed in the landfill) for the presence of PCBs before sending it to Green Bay Metropolitan Sewerage District for further treatment.

As an added precaution, water quality is monitored continuously at several locations on the dredge site. Air quality is also monitored both at the dewatering site and at the landfill while it is being filled.

Fox River/Green Bay NRDA: Value Equivalency Assessment Explained

By David Allen, U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (FWS), along with the federal and tribal trustees, recently completed a Value Equivalency Assessment (VEA) in Green Bay. The VEA was conducted as part of the federal/tribal Natural Resource Damage Assessment (NRDA). The NRDA focuses on returning the environment to the condition it would have been in had polychlorinated biphenyls (PCBs) never been released into the Lower Fox River from paper mills. The VEA is used to compare different kinds of restoration projects that can make up for the PCB-related injuries to natural resources. The FWS, the Oneida Tribe of Indians of Wisconsin, the Menominee Indian Tribe of Wisconsin, and the National Oceanic and Atmospheric Administration (NOAA) serve as trustees for federal and tribal resources on behalf of the public.

The VEA contains two key elements. The first is to **scale the amount** of selected restoration projects to appropriately replace injured resources and services and to take in to account damages that occur until the restoration is completed. The term “services” is applied to the ways that natural resources benefit the public. The second element is to **obtain public input** on the mix of the restoration projects to be selected.

Scaling the amount of restoration projects

If restoration projects offer the same or similar services at the same or similar locations of the injured resources, comparable restoration is easy to figure out. For example, if an existing boat launch is closed,

——— See *Value Equivalency Explained*, page 4



The Lothe brothers enjoy a day of fishing from the shores of the Fox River near DePere.

Value Equivalency Explained *from page 3*

opening a comparable new boat launch nearby provides the same or similar services of equal value. However, for PCB contamination in Green Bay, providing replacement for some injured resources and services may not be technically feasible or may be too expensive. An example would be to provide uncontaminated fish to recreational anglers until consumption advisories due to PCBs are eliminated. Or, some restoration activities may potentially be inappropriate, such as increasing the populations of wildlife especially susceptible to PCB contamination.

Many of the proposed restoration activities for the waters of Green Bay provide resources and services of a similar but different type or quality than those injured. In these cases, the scale of the restoration activity is determined by other means so that the projects produce equivalent resources and services to those that have been injured. One of the approaches being used by the federal/tribal trustees is called value-to-value scaling. Value-to-value scaling is used to determine the amount of restoration that has a public value equivalent to the amount of injured resources and their services.

Obtaining public input

To seek public opinion and assist in selecting and scaling restoration activities, a public survey was completed in September and October using a random sample of residents in northeast Wisconsin. The survey addressed people's preferences across these four groups of natural resource restoration programs for the Green Bay area.

1. Restoration of **wetlands** near the waters of Green Bay. Wetland restoration will provide increased spawning and nursery habitat and increased food for a wide variety of fish, birds and other wildlife. This provides wildlife services similar to, but not the same as, those injured by PCBs. Restoration levels range from taking no action up to a 20 percent increase in wetlands within five miles of Green Bay within the state of Wisconsin.
2. Removal of **PCBs** in the waters of Green Bay. PCB contamination causes fish consumption advisories and harm to various species of birds, fish, and other wildlife. Increased

removal of PCBs will reduce the number of years until fish consumption advisories and injuries to wildlife are eliminated. The levels of removal considered the result in the number of years until PCBs are at safe levels, ranging from 20 years up to more than 100 years.

3. Enhance **outdoor recreation** in a 10-county area surrounding Green Bay. Enhanced recreation includes increased facilities at existing parks such as adding picnic grounds, beaches, boat ramps, biking and hiking trails as well as developing new parks. Increased facilities and new parks provide recreation services, although these services generally are not the same as those injured by PCBs. The levels of recreation enhancement include from making no improvement up to a 10 percent increase in facilities at existing parks, and from making no change up to a 10 percent increase in new park acreage.
4. Reduce **runoff** that contaminates the waters of Green Bay. Controlling runoff improves water quality by lessening algae growth and improved water clarity, especially in the lower bay. This improves aquatic vegetation and habitat for fish and some birds and improves recreation. Runoff control in this case provides similar, but not the same services as those injured by PCBs. Runoff control levels range from no change in the amount of runoff up to a 50 percent reduction, reflected by changes in water quality measures.

These four programs were selected because the majority of proposed natural resource restoration actions for the Green Bay area fall into one of them. The VEA provides a large-scale perspective of public preferences across programs and of the scale of programs that provide equivalent value. The assessment is not intended to provide a selection of individual projects, such as specific wetland acres or specific recreational facilities. This task is left to regional planners who have a detailed knowledge of needs, technical effectiveness, and cost effectiveness.

Fox River/Green Bay NRDA: Value Equivalency Assessment Preliminary Results

By David Allen, U.S. Fish and Wildlife Service

Complete results of the federal/tribal trustee's Value Equivalency Assessment (see "Fox River/Green Bay NRDA: Value Equivalency Assessment explained" in this issue of the Fox River Current) will be released in December 1999 at a public meeting in Green Bay. The results will also be posted on the Internet at <http://www.fws.gov/r3pao/nrda>. However, preliminary results are already available from surveys of 100 residents from northeast Wisconsin, including 34 anglers who actively fish the waters of Green Bay.

The survey describes each of four natural resource restoration programs and asks questions about how important each type of restoration is to the public. The average levels of importance chosen by people who took the survey (known as mean importance scores) are listed

in Table 1. The data show a strong preference for polychlorinated biphenyl (PCB) removal and wetlands restoration. The public's preference for runoff control is less and is weakest for recreational facilities and parks.

People who took the survey were also asked if they believed the U.S. Fish and Wildlife Service (FWS) should do and spend less, the same, or more for each of the four restoration programs. Table 2 provides a summary of these results. While a majority of respondents indicate more should be done on each program, the sentiment to do more is the strongest for PCB removal, whereas, public sentiment is weakest for additional recreation programs.

Table 1
Importance of Natural Resource Actions
(1 = not at all important to 5 = very important)

Natural Resource Actions	Importance
Increase wetland acreage to support birds, fish and other wildlife	4.1
Remove PCBs so that it is safe to eat fish and waterfowl	4.5
Remove PCBs to reduce risks to birds, fish and other wildlife	4.5
Adding facilities at existing parks	3.9
Add new parks	3.6
Reduce runoff to reduce algae blooms	3.8
Reduce runoff to improve water clarity	4.0

Table 2
Preferred Actions for Natural Resource Programs

	Do less and spend less	Do the same	Do more and spend more
Restore wetlands	1%	36%	63%
Remove PCBs	N/A	6%	94%
Recreation	0%	44%	56%
Runoff	1%	32%	67%

See Value Equivalency Results, page 6

Value Equivalency Results *from page 5* ———

People also indicated which combinations of restoration programs they preferred by answering choice questions, also referred to as conjoint questions. Essentially, respondents chose among alternatives with varying mixes of wetland restoration, PCB removal, recreational enhancements, and runoff control. By examining the choices made among the natural resource programs, mathematical methods (known as random utility models) can be used to figure out how much of one kind of restoration is equivalent to different amounts of the other kinds of restoration. For example, FWS asked what increases in wetlands or recreation are equivalent to reducing the time until PCBs are at safe levels. Most respondents expressed comfort with the choice questions by indicating moderate to strong confidence in their choices. Over 70 percent indicated that their answers should be strongly considered by public officials in decision making.

Detailed analysis of the choice question data is not yet available. Preliminary analysis again indicates a strong preference for PCB removal, with moderate preference for runoff control and wetland restoration, and limited preference for recreational enhancements. This is confirmed in a follow-up question where respondents

indicated the importance of restoration program attributes in making choices among alternative mixes of programs as seen in Table 3.

The preliminary analysis of trade-offs across programs indicates that runoff controls and wetlands restoration would be of equivalent value to accelerating the reduction of PCBs to safe levels by increments of tens of years, depending on the level of runoff control and wetland restoration. Extensive recreational enhancements at existing and new parks would be of equivalent value to accelerating the reduction of PCBs to safe levels by perhaps a dozen years or less.

These preliminary results indicate a strong preference for restoration programs consistent with enhancing fish, birds, and other wildlife, and water quality, and low preference for recreational enhancement programs. They also indicate that to provide restoration with equivalent value to PCB injuries, as well as to compensate for decades of interim PCB injuries, will require significant actions combining enhancements in multiple natural resource programs.



Table 3
Importance of Program Attribute
In Making Choices Between Alternatives
(ordered by mean score, where 1 = not at all important and 5 = very important)

Program Attribute	Mean
Years until safe levels of PCBs	4.24
Acres of wetland	3.71
Inches of water clarity	3.59
Days of excess algae each summer	3.41
Facilities at existing parks	3.08
Acres of new parks	2.98

Superfund Liability System Unique Among Environmental Laws

By Roger Grimes, U.S. Environmental Protection Agency

During the final days of the Carter Administration, Congress passed a unique environmental law called the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. The Superfund Amendments and Reauthorization Act amended this law in 1986. Collectively, these laws have come to be known as Superfund. They represent Congress' attempt to strengthen the government's authority to deal effectively with problems relating to the release of hazardous substances, pollutants, and contaminants into the environment. Superfund authorizes the U.S. Environmental Protection Agency (EPA) to take direct response actions to decrease the effects of actual or threatened releases of hazardous substances through a fund created to pay for those response actions.

In addition, Superfund empowers the federal government to go to court to seek an environmental cleanup or to issue administrative orders to alleviate the immediate danger caused by the release of hazardous substances. Superfund also authorizes the federal government to recover its costs from those parties responsible for environmental problems.

What makes Superfund unique is its liability system. Most environmental laws, such as the Clean Water Act or the Clean Air Act, create a permit system through which people receive a permit from the federal or state government that requires them to comply with certain restrictions imposed by the permit. Violations of permit conditions can result in a requirement to perform cleanup actions or pay civil penalties. In contrast, no permits are issued under Superfund. The jurisdiction of Superfund takes effect whenever there is a release or threatened release of a hazardous substance into the environment. The liability for cleaning up the effects of a release, or for costs incurred by the federal government, falls to certain parties specifically identified in the law. The responsible parties are the current owners and operators of the facility where the release occurred, the owners and operators of the facility at the time of

the release, the transporters of hazardous substances who select the disposal site, and the generators of the hazardous substances.

Another difference between Superfund and other environmental laws is that the courts have found that Superfund liability is strict and, where harm is indivisible, the liability is joint and several. In practical terms, this means that each entity that falls into one of the liable party categories is equally liable with all other parties for the full cost of cleanup or for all response costs incurred by the federal government. This provides an effective incentive to enlist private parties in the enforcement process, and encourages them to work together to negotiate cleanup agreements with the federal government. Although each responsible party is fully liable for the cleanup, settlement of Superfund cases often is based on an allocation of liability based on the amount of hazardous substances contributed by each party. For example, a party that contributed 50 percent of the hazardous substances to a Superfund site would be liable for 50 percent of the cost of cleanup or response.



To make allocations as fair as possible, a great deal of time goes into identifying responsible parties. This is frequently done by reviewing things like old business records and customer lists to determine who may have contributed hazardous substances to a particular Superfund site. Then, based on whatever relevant records can be found, responsible parties can be allocated a percentage contribution share of the hazardous substances. This percentage is then typically converted to a parties' share of the cost of

See *Superfund Liability*, page 12

DNR Reviews Public Comments on Natural Resource Damage Assessment Plan

By Kelly Mella and Corinne Billings, Wisconsin Department of Natural Resources

In early August, the Wisconsin Department of Natural Resources (DNR) asked the public and stakeholders to review and comment on the state's plan for the Natural Resource Damage Assessment (NRDA) of the Lower Fox River. Written comments were accepted by DNR until September 7. This NRDA is being developed under the cooperative agreement between the state and the seven potentially responsible parties (PRPs) known as the Fox River Group (FRG).

An NRDA identifies and quantifies the injuries to natural resources and determines damages in economic terms, which are due to the public as a result of the discharge of contaminants. An NRDA also identifies specific actions, which must be conducted in order to restore the system and compensate the public for the damage the contaminants caused. The parties responsible for contamination and injuries must pay for the losses and help restore the natural resources through funding or direct action. A plan is one step in the assessment process, which ensures that an NRDA is performed thoroughly and systematically at a reasonable cost.

An NRDA is one mechanism to restore natural resources such as fish, wildlife, land, and water that have been injured by hazardous substances. Injuries may include death or destruction of natural resources.



Those injuries may also include the loss of resource availability to the public, as occurs when fish and wildlife become too contaminated to eat safely.

DNR received 12 sets of comments on the state assessment plan. The comments focused primarily on comparisons with the ongoing federal/tribal NRDA. Some of the comments related to concerns that the state's effort duplicates the other assessment and, therefore wastes time and resources. Other concerns were expressed relating to assurance that the assessment be based on the best available science, be conducted in accordance with the appropriate regulations and in the best interest of the public.

The NRDA plan is available at public libraries in the Fox River valley from Oshkosh to Door County. The plan is also posted on the DNR website at <http://www.dnr.state.wi.us>.

National Research Council Visits Fox River Valley

By Chuck Warzecha, Wisconsin Department of Health and Family Services

Last year, Congress and U.S. Environmental Protection Agency (EPA) asked the National Academies to study cleanups involving polychlorinated biphenyl (PCB)-contaminated sediment. On September 27 and 28, the National Academies' Committee on Remediation of PCB-Contaminated Sediments held two public

See Research Council, page 9

Research Council *from page 8*

sessions at the University of Wisconsin-Green Bay to hear comments on PCB cleanup options. Approximately 50 people attended each of the two sessions, offering the committee a sampling of the range of perspectives and public sentiment on issues surrounding the Fox River cleanup.

Committee Chairman J. Farrington opened the September 27 evening meeting with introductions of committee members and a summary of the committee's responsibilities. The



meeting then turned to invited speakers Rebecca Katers of the Clean Water Action Council, John Kennedy of the Science and Technical Advisory Committee for the Green Bay Remedial Action Plan, Tom Nelson representing the Oneida Nation, and several advisors to the Fox River Group of companies. The meeting closed with brief statements by eight audience members.

The September 28 morning public session focused primarily on the perspectives of several government agencies and included Fox River-specific presentations by Jim Hahnenberg of the EPA and David Allen of the U.S. Fish and Wildlife Service (FWS). EPA's presentations focused on experiences and initiatives nationally and in the Great Lakes region.

Before the sessions began, part of the committee toured portions of the Lower Fox River to view and better understand the contaminated sites. The committee is also looking at the PCB contamination problems in other sites in waterways such as the Hudson River in upstate New York and the New Bedford harbor in Massachusetts. Findings from these sessions and others to be held in Albany, NY, will be published by the National Academies committee at the end of the public hearing process.

Thermal Destruction – Using Heat to Remove PCBs from Sediments

By Corinne Billings, Wisconsin Department of Natural Resources

The Draft Feasibility Study identified and evaluated various options for cleaning up and treating polychlorinated biphenyl (PCB)-contaminated sediment in the Lower Fox River, including high temperature thermal destruction or HTTD. While no final decisions have been made on the use of HTTD as a means of treating contaminated sediment in the Lower Fox River, this article is meant to give a brief overview of this technology.

• *What is HTTD and how does it work?*

HTTD is an example of a technology that can destroy PCBs and certain other organic contaminants by using heat. HTTD uses a combination of thermal desorption and incineration. First, in the case of the Fox, once the contaminated sediment is dewatered, HTTD would treat the sediment by heating it to temperatures of 600°F to 1,200°F. Contaminants would vaporize and separate or desorb from the soil. Then, the vaporized contaminants would be collected and incinerated in an afterburner operating at about 2,000°F, destroying the contaminants.

• *Why consider HTTD?*

HTTD is effective at separating and destroying organic compounds such as PCBs from contaminated sediment, once it has been dewatered. This treatment technique has been used successfully at several other sites with PCB contamination, including Waukegan Harbor in Illinois. Mobile HTTD units are available for use throughout the country.

• *Will it work at every site?*

The first part of the HTTD process is not effective in the removal of most metals. However, mercury

See HTTD, page 10

HTTD from page 9

can be removed. Other metals may remain in the treated sediment that would require further treatment of the sediment. The presence of metals and their disposition must be determined before the sediment is processed. Special equipment may be needed to control metallic and other air emissions.

HTTD is not equally efficient at treating all types of sediment. As mentioned, sediment must be dewatered. If the sediment is still too wet, excess water must be vaporized, increasing energy needs. Sediment with high silt and clay content is also more difficult to treat. When heated, silt and clay emit dust and other particulate matter, which can disrupt the air emission control equipment. In addition, dense or heavy soil often does not allow the heat to penetrate and make contact with all of the contaminants. For contaminated sites with clay and silt, it may be necessary to add sand to the sediment to make the HTTD treatment more effective. U.S. Environmental Protection Agency tests of HTTD technologies have shown efficiencies ranging from less than 60 percent to greater than 99 percent elimination of contaminants. In most cases, because the levels of contamination remaining in the treated sediment prohibit returning it to the environment, it is disposed in landfills or similar facilities.

- ***Where is HTTD proposed in the Lower Fox River?***

The draft Feasibility Study proposes alternatives that use HTTD in certain parts of the Little Lake Butte des Morts area and downstream of the De Pere Dam. The study considers HTTD treatment for PCB concentrations greater than 50 parts per million in those areas.

- ***To learn more about HTTD...***

HTTD is discussed further in Section 6 of the Draft Feasibility Study. Copies of the study are available at the information repositories.

Fox River Puzzler: Are PCBs a threat to human health?

By Dave Crehore, Wisconsin Department of Natural Resources

Living near the lower Fox isn't a threat to your health. But if you eat fish or waterfowl from the river, all bets are off. Polychlorinated biphenyls (PCBs) in the environment move to people largely through contaminated food. When PCBs were commonly used in industry, it was also possible to pick them up on the job.

Health impacts of PCBs include negative effects on the nervous, immune, reproductive, circulatory and hormonal systems, as well as liver and skin disorders. The U.S. Environmental Protection Agency (EPA) classifies PCBs as probable human carcinogens. Studies of human health risks associated with eating fish and other PCB exposure have found:

- Behavioral and developmental problems like impaired responsiveness, short-term memory loss and reduced mental abilities in the children of mothers exposed to PCBs before and during pregnancy.¹
- In children, three times the chance of having lower IQ scores, twice the chance of lagging at least two years behind in reading comprehension, short and long-term memory loss and difficulties in paying attention.²
- Increased risk of cancer, for example non-Hodgkin's Lymphoma, and immune system effects among the general population and workers producing PCB capacitors.³

For all these reasons, advisories that warn people to limit their consumption of PCB-contaminated fish from the Fox River, Green Bay and Lake Michigan have been in effect since 1976.

1. Jacobson, 1984, 1985, 1990; Koopman-Esseboom, 1996; Huisman, 1995; Lonkey, 1996; Rogan, 1985.

2. Jacobson, 1996.

3. Bertazzi, 1987; Brown, 1987; Sinks, 1991; Svensson, 1984; Rothman, 1996; Hardell, 1996.

Profile on...Pat Pelky

Oneida area manager strives to protect natural resources for future generations

By Susan Pastor, U.S. Environmental Protection Agency

His love for natural resources motivates Pat Pelky, area manager for Oneida Health and Safety. A lifelong resident of the Fox Valley community, Pelky, 38, wants to see the Fox River cleaned up so future generations will have opportunities to connect with Oneida tribal traditions.

“There’s a whole generation growing up without traditional subsistence fishing and that concerns us,” he said. “They’re not taking part in something that has happened from generation to generation.”

As a boy living in Kaukauna, he fished with his father in Duck Creek, a tributary to Green Bay. They usually cooked what they caught, mostly white sucker and perch. Although he didn’t realize it at the time, his parents needed those fish to feed their five sons and five daughters. “We lived on fish and wild game – subsistence,” he explained. “We didn’t practice it consciously, but with a family of 12, it probably was a necessity.”

He also has fond memories of the family garden. “I remember canning 100 quarts of tomatoes as a boy,” he said. “The fishing and hunting was fun, but the picking and canning of vegetables was work.”

He added that he still does a little canning today “for fun,” but prefers to spend his time outdoors. “That’s my true love,” he said. “I love to fish and hunt, but we go north to find cleaner waters.”

Pelky left Kaukauna and moved to the Green Bay area, within Oneida boundaries, in 1985. He officially moved to the reservation in 1988. “I’ve lived my whole life on or near the reservation,” he added.



Pat Pelky

Pelky, a father of four and grandfather of one “with another on the way,” enjoys spending time with his family. He also enjoys his job as an area manager, a position he has held with the Tribe since 1995. His many responsibilities include supervising a staff of 40 people. His typical day involves facilitating and providing leadership to his staff, which is comprised of about half Oneida and half non-Oneida. “We do lots of team building,” he explained. “Everyone is different, and we recognize that.”

Although Pelky has staff dedicated to the Fox River project, he still remains closely involved. As the “buffer person” between the technical staff and the Oneida Business Committee, he regularly attends committee meetings to provide updates. “The Fox River topic is a standing agenda item at the meetings,” he continued. “We have a good working relationship. I provide comprehensive information so the Business Committee members can decide on the best course of action to take.”

See Pelky, page 12

Pelky from page 11

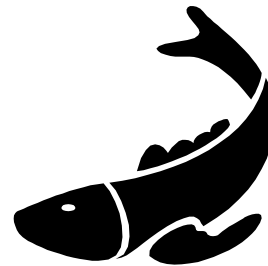
In addition to Oneida officials, Pelky also interacts with state and federal government partners, Pelky attends meetings related to the Fox River project at least monthly. "I'll travel around the state and to Chicago, if necessary," he added. "Wherever the meetings are, we'll go, because we see the tribe as an equal partner."

Pelky is also completing a bachelor's degree through the University of Wisconsin in water resources with an emphasis in limnology. "It's a chemical/physical/biological combination," he explained. "It's similar to oceanography, but for fresh water."

As a resident of the Oneida reservation, Pelky believes his hopes for the Fox River are really no different

than anyone else's. "Anybody who cares about natural resources has a strong opinion," he said. "My hope is that the Fox River gets cleaned up to a standard where the fish advisories are released."

Pelky said the tribe also has hopes for the Fox River that mirror those of other area residents. "We're also concerned about not breaking the economy because we live here, too," he concluded. "Wherever that balance is, that's what we would like to see."

**Superfund Liability from page 7**

cleanup in a Superfund settlement. This can be a very contentious process because a few percentage points up or down for a particular party can make an enormous difference in the cost to that party.

This general process for allocating liability in a Superfund case is often complicated when certain responsible parties cannot be located or have no money, thereby creating "orphan shares" that must be covered by other parties. In addition, the records on which allocations are based are often incomplete, unreliable, or missing. This causes parties to have to make assumptions based on existing records to attempt to reach reasonable allocations.

The Superfund liability process also allows these responsible parties to bring in other potentially liable parties who they believe contributed to the hazardous substance release. This can often ensure that all responsible parties ultimately share in the cost of cleanup.

EPA has sought to alleviate some of the harsh effects of the Superfund liability process by creating policies

to deal with specific situations. For example, it has created policies for parties who, though technically liable for the full amount of cleanup, contributed such small amounts of the hazardous substances released that they should not be subjected to the full allocation. This policy allows these parties to reach an agreement with the federal government for a reasonable allocated amount. In return for a cash payment, liability of these small contributors is completely resolved. They also receive protection from the federal government from future lawsuits by other responsible parties. In addition, EPA has created policies for settlement with municipalities and with parties who cannot afford to pay their allocated amount.

Despite the controversy often associated with it, Superfund has been responsible for bringing about billions of dollars worth of environmental cleanup activities. And, with the number of Superfund sites yet to be addressed, it promises to continue well into the future.

Information Available at Local Libraries

The Intergovernmental Partners invite the public to review technical reports, fact sheets and other documents related to the Lower Fox River cleanup at information repositories set up in the reference sections of the following local libraries. Information repositories at public libraries in Menasha and Kimberly have been discontinued.

- **Appleton Public Library**, 225 N. Oneida St., Appleton, WI; 920-832-6170
- **Brown County Library**, 515 Pine St., Green Bay, WI; 920-448-4381, ext. 394
- **De Pere Public Library**, 380 Main Ave., DePere, WI; 920-448-4407
- **Door County Library**, 104 S. Fourth Ave., Sturgeon Bay, WI; 920-743-6578
- **Kaukauna Public Library**, 111 Main Ave., Kaukauna, WI; 920-766-6340
- **Little Chute Public Library**, 625 Grand Ave., Little Chute, WI; 920-788-7825
- **Neenah Public Library**, 240 E. Wisconsin Ave., Neenah, WI; 920-751-4722
- **Oneida Community Library**, 201 Elm St., Oneida, WI; 920-869-2210
- **Oshkosh Public Library**, 106 Washington Ave., Oshkosh, WI; 920-236-5200
- **Wrightstown Public Library**, 529 Main St., Wrightstown, WI; 920-532-4011

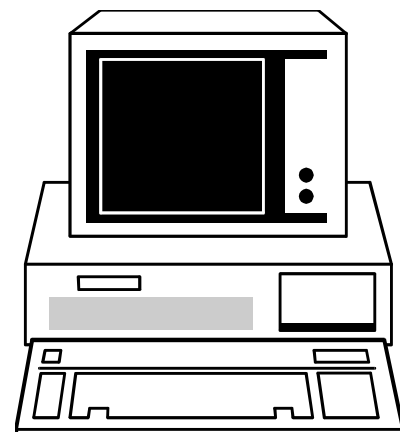
Check out these web sites:

<http://www.dnr.state.wi.us/org/water/wm/lowerfox/>

<http://www.epa.gov/region5/foxriver/>

<http://www.fws.gov/r9dec/nrdar/nrdamain.html>

<http://www.fws.gov/r3pao/nrda/>





Prepared by the Fox River Intergovernmental Partnership: Wisconsin Department of Natural Resources, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Menominee Indian Tribe of Wisconsin, Oneida Tribe of Indians of Wisconsin, and National Oceanic and Atmospheric Administration. Supporting agencies include the Wisconsin Department of Health and Family Services, the U.S. Agency for Toxic Substances and Disease Registry, and the U.S. Army Corps of Engineers.

Disclaimer: The opinions expressed in these articles are solely those of the authors and are not necessarily shared by all members of the Fox River Intergovernmental Partnership.

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Fox River Current is published bimonthly by the Fox River Intergovernmental Partnership. Its purpose is to provide up-to-date information about cleanup and restoration efforts on the Lower Fox River. Call Greg Swanson at (608) 264-6024 to request a subscription or alternative format. Feedback on articles and ideas for future issues are welcome. Send comments to Greg Swanson, *Fox River Current*, DNR, CE/6, P.O. Box 7921, Madison, WI 53707 or email <swansg@dnr.state.wi.us>



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